AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) In a turf machine including a base mounted on a plurality of wheels and having a turf machine operator interface, a hydraulic control system for regulating the speed and direction of the turf machine, comprising:

an engine;

a hydraulic pump, driven by the engine, having an inlet and an outlet providing a source of unidirectional pressurized hydraulic fluid useful for driving hydraulic motors;

a first valve set having an inlet connected to the hydraulic pump outlet and a first and second outlet, said first valve set having a slave-pressure operated pressure compensation bypass valve wherein the slave-pressure operated bypass valve is operable to shunt at least a portion of the fluid around the first valve set in response to changes in the flow of fluid within the first valve set;

a first hydraulic motor having an inlet connected to the first outlet of the first valve set and an outlet;

a second valve set having an inlet connected to the second outlet of the first valve set, further having a first and second outlet, the second outlet being connected to the inlet of the hydraulic pump;

a second hydraulic motor having an inlet connected to the first outlet of the second valve set, wherein the first and second hydraulic motors are

coupled to the hydraulic pump in series, wherein said first valve set contains a first variable volume control valve which regulates volume and direction of fluid flow to the first hydraulic motor; and

wherein the second valve set contains a second variable volume control valve which regulates volume and direction of the fluid flow to the second hydraulic motor.

2. (Cancelled)

3. (Original) The system of Claim 1, wherein the pump is a variable volume pump.

4. (Previously Presented) The system of Claim 1, wherein the first variable volume control valve contains a first forward setting for driving the first hydraulic motor in a forward direction, a neutral position for not allowing fluid to flow to the first hydraulic motor, a reverse setting for providing flow for driving the first hydraulic motor in a reverse direction and;

a second variable volume control valve contains a first forward setting for driving the second hydraulic motor in a forward direction, a neutral position for not allowing fluid to flow to the second hydraulic motor, a reverse setting for providing a flow for driving the second hydraulic motor in a reverse direction.

5. (Currently Amended) The system of Claim 4, further having a ~~left~~ first operable control coupled to the first valve;

a first operable control coupled to the second valve; and

a second operable control coupled to the hydraulic pump.

6. (Original) The system of Claim 3 having a first clutch disposed between the engine and the hydraulic pump.

7. (Currently Amended) In a turf machine including a base mounted on a plurality of wheels, a hydraulic control system for regulating the speed and direction of the mower comprising:

a hydraulic pump, having an outlet and an inlet, for controlling hydraulic fluid flow;

a first valve set having a first and second inlet connected to the hydraulic pump outlet and a first and second outlet;

a first hydraulic motor having an inlet connected to the first outlet of the first valve set and an outlet connected to the second inlet of the first valve set;

a second valve set having a first and second inlet, the first inlet being connected to the second outlet of the first valve set, and further having a first and second outlet, the second outlet being connected to the inlet of the hydraulic pump, said second valve set having a slave-pressure operated pressure compensation bypass valve and a ~~second~~ variable volume control valve which regulates volume and direction of the fluid flow to the second hydraulic motor wherein the slave-pressure operated

bypass valve is operable to shunt at least a portion of the fluid around the first valve set in response to changes in a property of fluid within the first valve set; and

a second hydraulic motor having an inlet connected to the first outlet of the second valve set and an outlet connected to the second inlet of the second valve set, wherein the first and second hydraulic motors are coupled to the hydraulic pump in series.

8. (Currently Amended) The system of Claim 7, wherein said first valve set contains a ~~first~~ second variable volume control valve which regulates volume and direction of fluid flow to the first hydraulic motor.

9. (Original) The system of Claim 7, wherein the pump is a single direction variable volume pump.

10. (Currently Amended) The system of Claim [[9]] 8, wherein the first variable control valve contains a first forward setting for driving the first hydraulic motor in a forward direction, a neutral position for not allowing fluid to flow to the first hydraulic motor, a reverse setting for providing flow for driving the first hydraulic motor in a reverse direction and;

a second variable control valve contains a first forward setting for driving the second hydraulic motor in a forward direction, a neutral position for not allowing fluid to flow to the second hydraulic motor, a reverse setting for providing a flow for driving the second hydraulic motor in a reverse direction.

11. (Original) The system of Claim 9 having a first clutch disposed between the internal combustion engine and the variable volume pump.

12. (Original) The system of Claim 11 further having cutter blades and a second clutch disposed between the engine and the cutter blades.